

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-PR1-125U-050D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

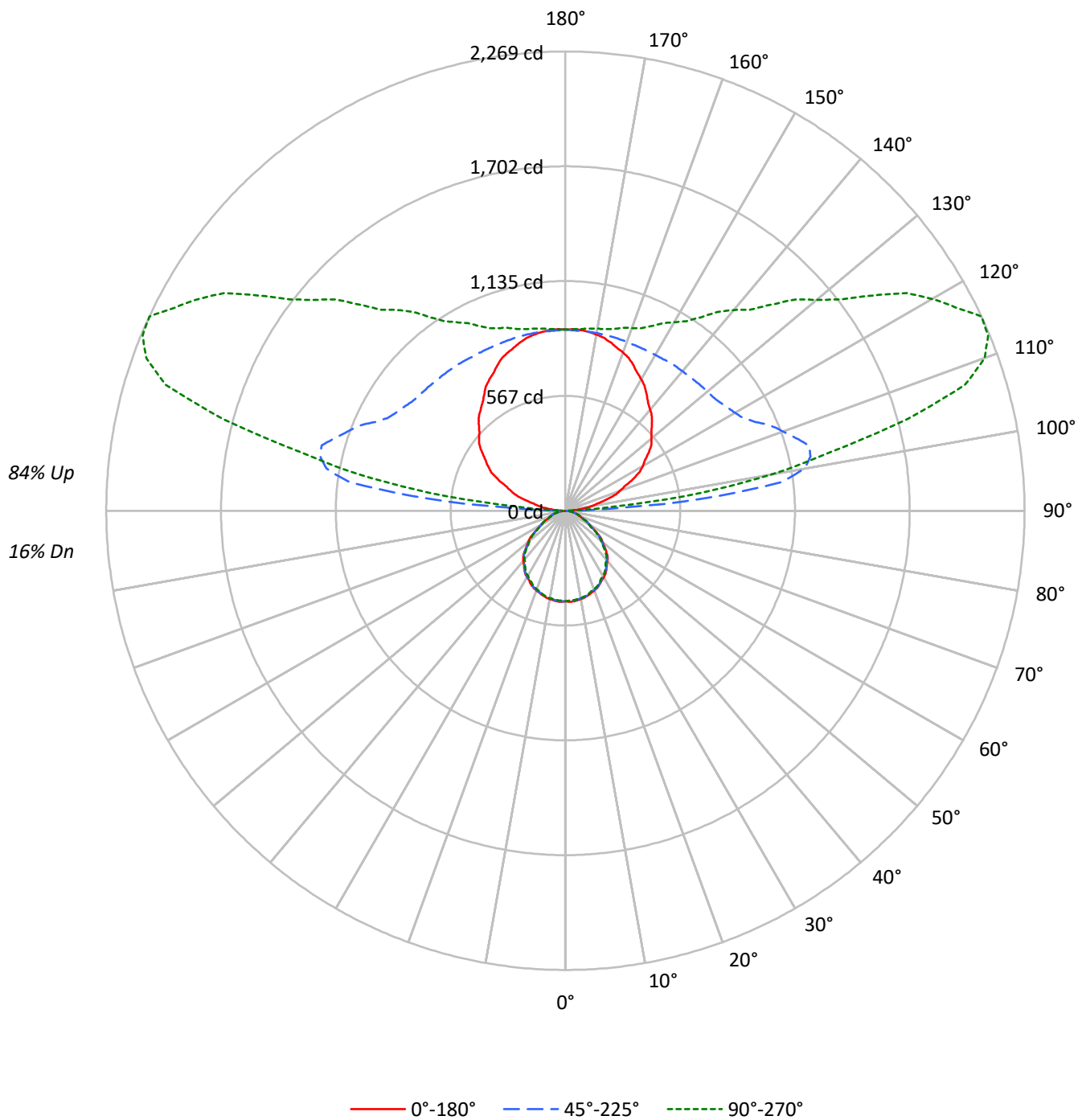
Lumens per Lamp: N/A
Luminaire Lumens: 6895.3 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25
1	90	86	83	79	79	76	73	70	57	55	53	39	38	37	22	22	21
2	82	75	70	65	72	66	62	58	50	46	44	34	32	31	20	19	18
3	75	66	59	54	66	58	53	48	44	40	37	30	28	26	18	16	15
4	69	58	51	45	60	52	45	41	39	35	31	27	24	22	16	14	13
5	63	52	44	39	55	46	39	35	35	30	27	24	21	19	14	13	12
6	58	46	39	33	50	41	35	30	31	27	23	22	19	17	13	11	10
7	53	42	34	29	47	37	31	26	28	23	20	20	17	15	12	10	9
8	49	38	30	25	43	33	27	23	25	21	18	18	15	13	11	9	8
9	46	34	27	22	40	30	24	20	23	19	16	16	13	11	10	8	7
10	42	31	24	20	37	28	22	18	21	17	14	15	12	10	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2753	2753	2753
5°	2778	2757	2743
10°	2769	2750	2736
15°	2757	2740	2725
20°	2743	2726	2705
25°	2724	2706	2674
30°	2695	2675	2637
35°	2655	2632	2594
40°	2594	2566	2520
45°	2489	2445	2395
50°	2302	2247	2203
55°	2010	1963	1923
60°	1693	1679	1646
65°	1464	1470	1458
70°	1345	1352	1352
75°	1293	1293	1302
80°	1215	1229	1215
85°	981	1087	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2489 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.3	0.6
10°-20°	121.1	1.8
20°-30°	182.7	2.6
30°-40°	217.7	3.2
40°-50°	214.6	3.1
50°-60°	164.0	2.4
60°-70°	101.5	1.5
70°-80°	57.7	0.8
80°-90°	19.6	0.3
90°-100°	418.4	6.1
100°-110°	1127.1	16.3
110°-120°	1182.9	17.2
120°-130°	959.9	13.9
130°-140°	752.8	10.9
140°-150°	578.0	8.4
150°-160°	415.6	6.0
160°-170°	253.9	3.7
170°-180°	85.6	1.2
0°-30°	346.1	5.0
0°-40°	563.8	8.2
0°-60°	942.4	13.7
0°-90°	1121.2	16.3
90°-120°	2728.4	39.6
90°-150°	5019.1	72.8
90°-180°	5774.0	83.7
0°-180°	6895.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	450	445	446	445	444	43
15°	433	428	430	429	428	122
25°	401	396	399	394	394	185
35°	354	349	350	346	346	221
45°	286	282	281	276	275	219
55°	187	184	183	180	179	168
65°	101	100	101	100	100	102
75°	54	54	54	55	55	57
85°	14	15	15	15	15	16
90°	2	7	14	15	15	5
95°	64	228	686	351	243	67
105°	208	324	1246	1865	1750	219
115°	368	450	1038	2006	2269	362
125°	502	577	932	1575	1854	449
135°	605	675	906	1271	1439	467
145°	700	754	894	1087	1167	439
155°	794	823	886	975	1006	366
165°	861	871	890	925	930	243
175°	896	894	891	904	901	85
180°	894	894	894	894	894	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	447.6	447.6	447.6	447.6	447.6
2.5°	450.4	446.5	447.6	446.7	444.6
5°	450.0	445.1	446.5	444.9	444.2
7.5°	446.5	441.7	443.1	441.5	441.1
10°	443.4	438.9	440.3	438.8	438.0
12.5°	440.0	435.2	436.9	435.1	434.3
15°	433.0	428.5	430.3	428.7	428.0
17.5°	425.3	420.5	422.3	420.5	419.5
20°	419.1	414.6	416.4	413.7	413.3
22.5°	412.3	407.8	409.6	406.0	405.9
25°	401.4	396.5	398.7	394.4	394.0
27.5°	388.3	383.8	385.6	381.3	380.9
30°	379.4	374.9	376.7	372.1	371.3
32.5°	369.2	365.0	366.5	361.9	361.4
35°	353.6	349.4	350.5	345.8	345.5
37.5°	335.8	332.0	332.6	327.5	327.1
40°	323.1	319.3	319.6	314.2	313.8
42.5°	309.2	305.5	305.1	299.7	299.4
45°	286.1	282.3	281.1	276.0	275.3
47.5°	259.7	255.9	253.6	249.5	249.0
50°	240.6	236.8	234.8	231.3	230.2
52.5°	219.9	216.2	214.5	211.3	210.1
55°	187.4	184.4	183.1	180.0	179.3
57.5°	156.5	154.4	154.1	151.1	150.8
60°	137.6	136.5	136.5	133.8	133.8
62.5°	121.6	120.8	121.4	119.6	119.3
65°	100.6	99.9	101.0	100.2	100.2
67.5°	84.1	84.1	84.7	84.4	84.4
70°	74.8	74.8	75.2	75.2	75.2
72.5°	66.5	66.2	67.2	67.2	66.9
75°	54.4	54.4	54.4	54.8	54.8
77.5°	42.3	42.4	42.7	42.6	42.3
80°	34.3	34.7	34.7	34.3	34.3
82.5°	26.3	26.7	26.7	26.6	26.3
85°	13.9	14.6	15.4	15.4	15.4
87.5°	4.5	6.6	8.9	9.1	8.8
90°	2.3	6.7	13.7	14.8	14.8
92.5°	27.8	98.2	194.2	93.5	64.9
95°	63.8	227.6	685.9	350.8	242.7
97.5°	101.9	260.5	1075.8	898.8	677.7
100°	131.0	273.6	1199.8	1255.3	1041.4
102.5°	159.3	292.1	1240.8	1522.4	1346.8
105°	208.5	324.4	1246.5	1864.9	1750.2
107.5°	255.0	358.4	1193.4	2040.9	2070.6
110°	286.0	384.0	1145.1	2095.6	2203.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	318.8	409.7	1098.6	2083.5	2261.1
115°	368.0	450.5	1038.0	2005.7	2268.6
117.5°	412.9	490.2	991.1	1881.5	2174.3
120°	442.1	516.7	967.4	1792.3	2093.1
122.5°	467.6	541.4	950.1	1701.1	2001.1
125°	502.5	577.1	932.1	1575.3	1853.8
127.5°	536.0	609.5	920.7	1464.3	1713.0
130°	556.0	629.6	916.1	1400.8	1619.1
132.5°	576.1	648.7	911.5	1344.8	1545.3
135°	605.0	675.2	905.8	1270.9	1439.1
137.5°	632.6	699.9	902.9	1208.2	1346.3
140°	651.8	716.4	900.1	1169.6	1294.4
142.5°	671.8	732.0	898.3	1133.6	1238.8
145°	699.6	754.2	894.5	1086.6	1166.8
147.5°	729.7	777.2	890.6	1047.0	1110.0
150°	749.7	791.0	888.8	1022.1	1074.5
152.5°	768.0	803.8	887.8	1001.8	1044.4
155°	794.2	823.1	886.5	974.9	1006.1
157.5°	817.2	839.7	886.7	956.0	976.9
160°	831.8	850.7	887.6	944.9	960.5
162.5°	844.5	859.9	888.5	935.7	946.9
165°	861.4	871.4	889.9	925.3	929.8
167.5°	875.1	880.9	891.0	917.3	919.1
170°	884.2	886.4	891.0	912.7	912.7
172.5°	889.7	890.1	891.9	908.1	908.1
175°	895.6	894.5	891.0	903.5	901.3
177.5°	898.1	896.3	891.7	899.0	897.2
180°	894.5	894.5	894.5	894.5	894.5

(END OF REPORT)